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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,167	07/11/2001	Kenichiro Suetsugu	43888-112	7945
20277 7590 07/22/2008 MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096				
EXAMINER				
PHAN, THIEM D				
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3729				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

09/889,167

**Applicant(s)**

SUETSUGU ET AL.

**Examiner**

THIEM PHAN

**Art Unit**

3729

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6, 8, 11-13 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12 and 13 is/are allowed.
- 6) ☒ Claim(s) 6, 8, 11 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. The amendment filed on 04/16/08 has been fully considered and made of record.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 6, 8, 11 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheidt et al (US 5,654,902) in view of Nerlikar (US 5,629,981) and further view of Applicants' Admitted Prior Art, hereinafter AAPA.

**With regard to claim 6,** Scheidt et al teach a product or article such as TV receiver (Fig. 1, 1; col. 2, line 31) with recyclable components under an environment point of view (Col. 1, lines 7-9, lines 18-20), having a circuit board (Fig. 1, 2 or 3) with parts soldered on board, and identification information stored in memory IC such as EPROM (Fig. 1, 2a; col. 4, lines 29-32) containing all manufacturing data including composing materials, presence of hazardous materials (Col. 3, lines 50-60) collected for help recycling of said article during the removal of hazardous materials or the recovery of precious metals and sorting of plastic fractions (Col. 3, lines 62-65). However Scheidt et al do not specifically describe the composite materials and hazardous materials as of lead free solder or lead solder used on circuit board, which identification data is stored in the memory IC that is of non-contact reading type.

Nerlikar teaches a method of accessing real time data basis from a non-contact reading type IC or RFID badge attached to containers (Col. 19, lines 16-30), which contains memory device collecting data information about the containers' contents, in order to permit a person to handle potential hazardous waste while reducing the potential for inadvertent exposure.

AAPA teaches an article, which has a circuit containing the type and composition of lead solder or lead free solder used on soldered parts or chip terminals of circuit board, in need for recycling (Page 2, last paragraph – page 3, 1<sup>st</sup> paragraph).

It would be obvious to one of ordinary skill in the art at the time the invention was made to provide Scheidt et al with any reasonable number of data, including the type and composition of lead free solder or lead solder data to the stored information in the memory of a non-contact IC or RFID device, in order to obtain optimum efficiency of the recycling during the removal, the recovery and the sorting of different materials while minimizing the risks of exposure.

Furthermore, since the article has an onboard memory chip, which can be cheaply and exponentially expanded in gigabyte or terabyte data storage, a further input of additional data such as solder composite, radioactive material, music/audio and video signals, etc... is just mere obviousness in facilitating the recycling process.

**With regard to claim 8**, Scheidt et al teach a product or article such as TV receiver (Fig. 1, 1; col. 2, line 31) with recyclable components under an environment point of view (Col. 1, lines 7-9, lines 18-20), having a circuit board (Fig. 1, 2 or 3) with parts soldered on board, and a housing (Col. 2, line 24) accommodating said article with identification information stored in memory IC such as EPROM (Fig. 1, 2a; col. 4, lines 29-32) containing all manufacturing data including composing materials, presence of hazardous materials (Col. 3, lines 50-60) collected

for help recycling of said article during the removal of hazardous materials or the recovery of precious metals and sorting of plastic fractions (Col. 3, lines 62-65). However Scheidt et al do not specifically describe the composite materials and hazardous materials as of lead free solder or lead solder used on circuit board, which identification data is stored in the memory IC that is of non-contact reading type.

Nerlikar teaches a method of accessing real time data basis from a non-contact reading type IC or RFID badge attached to containers (Col. 19, lines 16-30), which contains memory device collecting data information about the containers' contents, in order to permit a person to handle potential hazardous waste while reducing the potential for inadvertent exposure.

AAPA teaches an article, which has a circuit containing the type and composition of lead solder or lead free solder used on soldered parts or chip terminals of circuit board, in need for recycling (Page 2, last paragraph – page 3, 1<sup>st</sup> paragraph).

It would be obvious to one of ordinary skill in the art at the time the invention was made to provide Scheidt et al with any reasonable number of data, including the type and composition of lead free solder or lead solder data to the stored information in the memory of a non-contact IC or RFID device, in order to obtain optimum efficiency of the recycling during the removal, the recovery and the sorting of different materials while minimizing the risks of exposure.

Furthermore, since the article has an onboard memory chip, which can be cheaply and exponentially expanded in gigabyte or terabyte data storage, a further input of additional data such as solder composite, radioactive material, music/audio and video signals, etc... is just mere obviousness in facilitating the recycling process.

**With regard to claim 11**, Scheidt et al teach a process of recycling wastes of an electrical appliance or TV set comprising a product or article such as TV receiver (Fig. 1, 1; col. 2, line 31) with recyclable components under an environment point of view (Col. 1, lines 7-9, lines 18-20), having a circuit board (Fig. 1, 2 or 3) with parts soldered on board, and a housing (Col. 2, line 24) accommodating said article with identification information stored in memory IC such as EPROM (Fig. 1, 2a; col. 4, lines 29-32) containing all manufacturing data including composing materials, presence of hazardous materials (Col. 3, lines 50-60) collected for help recycling of said article during the removal of hazardous materials or the recovery of precious metals and sorting of plastic fractions (Col. 3, lines 62-65), said process comprising a step of identifying wastes or hazardous materials and reusable materials of electrical appliance from those of various electrical appliances based on the identification information (Col. 3, lines 60-65). However Scheidt et al do not specifically describe the composite materials and hazardous materials as of lead free solder or lead solder used on circuit board, which identification data is stored in the memory IC that is of non-contact reading type.

Nerlikar teaches a method of accessing real time data basis from a non-contact reading type IC or RFID badge attached to containers (Col. 19, lines 16-30), which contains memory device collecting data information about the containers' contents, in order to permit a person to handle potential hazardous waste while reducing the potential for inadvertent exposure.

AAPA teaches an article, which has a circuit containing the type and composition of lead solder or lead free solder used on soldered parts or chip terminals of circuit board, in need for recycling (Page 2, last paragraph – page 3, 1<sup>st</sup> paragraph).

It would be obvious to one of ordinary skill in the art at the time the invention was made to provide Scheidt et al with any reasonable number of data, including the type and composition of lead free solder or lead solder data to the stored information in the memory of a non-contact IC or RFID device, in order to obtain optimum efficiency of the recycling during the removal, the recovery and the sorting of different materials while minimizing the risks of exposure.

Furthermore, since the article has an onboard memory chip, which can be cheaply and exponentially expanded in gigabyte or terabyte data storage, a further input of additional data such as solder composite, radioactive material, music/audio and video signals, etc... is just mere obviousness in facilitating the recycling process.

**With regard to claim 21**, Scheidt et al teach that the identification information includes a labeling or name or symbol carried on said housing (Col. 1, lines 23-27).

#### ***Allowable Claims***

4. Claims 12 and 13 are allowed.

#### ***Response to Arguments***

5. Applicants' arguments (4/16/08) with respect to claims 6, 8, 11 and 21 have been considered but are moot in view of the new grounds of rejection.

#### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

Applicants' amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Phan whose telephone number is 571-272-4568. The examiner can normally be reached on M - F, 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR



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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Phan Thiem/

Tim Phan  
Examiner  
Art Unit 3729

July 17, 2008